AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions and listings of claims in the application.

The listing:

1. (Amended) In a fluid processing system in which a fluid is caused to flow from a ~~distributer~~ distributor, through a resin bed, to a collector, the improvement which comprises:

providing said resin bed as a column having ~~greater~~ a diameter which is dimensionally larger than a height thereof; and

providing said distributor ~~and said collector as structure comprising~~ as a fractal structure~~elements~~, said fractal structure including a plurality of individual conduits positioned in separate planes from one another.

2. (Original) An improvement according to Claim 1, wherein the ratio of said diameter to said height is at least 2:1.

3. (Original) An improvement according to Claim 1, wherein said distributor provides a population of fluid exits having a density greater than about 200 per square foot at a fluid/distributor interface.

4. (Original) An improvement according to Claim 3, wherein said density is greater than about 200 per square inch.

5. (Original) An improvement according to Claim 1, said system being configured and arranged to produce process fluid flow through said bed in response to a pressure drop across said bed of less than 5 psi.

6. (Original) An improvement according to claim 1, in combination with a

second fluid processing system in which fluid is caused to flow from a second distributer, through a second resin bed, to a second collector, wherein said second distributor and second collector comprise fractal structure.

7.(Amended) A fluid processing system comprising:

a first resin bed with an inlet end, an outlet end, and a diameter at least twice the distance between said inlet end and said outlet end;

a first fluid distributor constructed and arranged to introduce fluid at said inlet end of said resin at a density of at least 200 distribution exits per square foot, said distributor including a plurality of individual conduits, positioned in separate planes from one another so as to not intersect one another; and

a first fluid collector constructed and arranged to collect once processed fluid at said outlet end of said resin bed.

8. (Original) A system according to Claim 7, wherein said collector is constructed and arranged to collect fluid through collection inlets at a density of at least 200 per square foot.

9. (Original) A system according to Claim 8, wherein said distributor and said collector are fractals.

10. (Original) A system according to Claim 8, wherein the ratio of diameter to height of said resin bed is at least 10:1.

11. (Original) A system according to claim 7, wherein said system is constructed and arranged to produce processing flow conditions with a pressure drop across said bed of less than 5 psi.

12. (Original) A system according to claim 7, further comprising:

a second resin bed with an inlet side, an outlet side, and a diameter at least twice the distance between said inlet side and said outlet side;

a second fluid distributor constructed and arranged to introduce said once processed fluid at said inlet side of said second bed, said second distributor having a density of at least 200 distribution exits per square foot; and

a second fluid collector constructed and arranged to collect twice processed fluid at said outlet side of said second resin bed.

13. (Original) A system according to claim 12, wherein said first and second fluid distributors comprise fractal structure.

14. (Original) A system according to claim 13, wherein said first and second fluid collectors comprise fractal structure.

15. (Original) A system according to claim 14, wherein a recursive fractal element may be characterized as having an "H" shape.

16. (New) A fluid processing system comprising:

a first resin bed with an inlet end, an outlet end, and a diameter at least twice the distance between said inlet end and said outlet end;

a first fluid distributor, constructed and arranged to introduce fluid at said inlet end of said resin bed, said first fluid distributor including a plurality of conduits, each said conduit being divided into successive pluralities of conduit branches, said conduit branches being arranged in generations, each generation of conduit branches being positioned in a plane separate from conduits of a rspective preceding and subsequent generation of conduit branches, said each said conduit branch having a distribution exit, said first fluid distributor having a density of at least 200 distribution exits per square foot; and

a first fluid collector constructed and arranged to collect once processed fluid at said outlet end of said resin bed.